

Present Condition of Citrus Culture in New State of Arizona

(By Foster Rockwell, Member Arizona Horticultural Commission.)

The attractiveness of orange culture is no new idea. We associate with the fragrance of the orange blossom much of the chivalry and history of the Mediterranean countries and even the story of Palestine itself. The romance and fiction of the Middle Ages spoke often of its lure. Time has no whit lessened its wholesomeness or impaired its glamor. It wows us now in the same inviting manner. Although no longer do we picture the studious friars and monks gathered under the heavily loaded orange trees in the court of the old Spanish mission. Verily government reclamation and refrigerator car, dispatch service has commercialized the orange industry. Now the distinct atmosphere of the market place appears. Much of the pristine charm of by gone days we lose but no little of the spell abides and with it the suggestion of bright sunny days and balmy evenings heavy with the fragrance of the bloom.

The history of citrus culture in the Salt River valley is indeed one of a sporadic nature. In early days most of the planting consisted of a few seedling varieties set out in the yards of Phoenix. The spring of 1879 marked the first start of a commercial orchard. This grove, however, like many later ones had a hard time to survive the early adversities. As there was no Roosevelt dam to insure adequate irrigation the trees in many cases weathered the drought only to enter the winter weakened and sickly to disappear at the first frost. The completion of the new reclamation project however, brought assurance of regular supply of water for irrigation purposes and really marks the inception of the orange industry here. The experimental stage demonstrated that we can raise a heavier, sweeter, and an orange of more juice content than elsewhere. We can market this same orange

matured earlier than competing districts. The fact that a carload of Arizona navel oranges sold in New York in competition with oranges from Porto Rico, Florida and California at the highest net figure in the history of orange growing is sufficient evidence toward demonstrating the high merits of the Arizona orange. From this experimental period we gain then the knowledge of quality with an established reputation second to none.

Our orchards however are not the symmetrical things of beauty so common in the California landscape. The story of hard times from their start appears. Verily it is a tale of the survival of the fittest. For on viewing the old groves it is safe to affirm that from 20 per cent to 60 per cent of the bearing acreage is non-producing—either missing trees or those that fail to pay their share of the operating expenses. Were it not for the well known obstacles of the past such a state of things would be a reflection on the personal of our growers.

Ever since the start of the new era the scarcity of good nursery trees has postponed the remodeling of the old groves and limited the planting of new. Growers now are beginning to recognize unprofitable trees seeing that their greater utility exists only as stove wood. Vacant places will be filled with first class trees. Top-budding to another or improved variety will give new life and oftentimes bring the tree into the fold as a revenue yielding unit.

Frequently we hear the question, "Does the orange business pay here?" Can we not ask this same question of any business and get any variety of answers? We will agree, I think, that success in any endeavor is contingent on many factors. For if we investigate the orange industry of California with which we associate years of colossal success and view same from financial viewpoint we find the yield per acre to be so low that most of the groves fail in paying the up-keep cost let alone returning profit on the investment. And yet the fact does not deter the sales of fine orchards there at \$2,000 and \$4,000 per acre. Here the earning power justifies the price. And we may readily infer that soil and climate minus the man is no guarantee of success in California.

Having no grove or compact trees here of full bearing age how futile to compare our returns on the per acre basis. We must better confine our comparison to the performance of individual trees. And if we find here these individual trees in no uncommon number bearing yearly equal to California's best, we surely are correct in assuming that we may succeed in raising a grove including only trees of a high producing value. Let us bear in mind our comparison that these California specimen trees never lacked water, fertilization or care. Now, it is no rare occurrence to find in California a navel grove produc-

Let us remember that the future of the industry here primarily depends upon the man. We want five and ten acre orchards. Success rests with intensive cultivation. And a five acre bearing grove properly kept will maintain a family. Let us have compact groves where every tree produces heavily. This talk of 160 and 640 acre groves will not react to the credit of Arizona as an orange district. The successful California grower recognizes that some trees are too expensive to plant even as gifts. And every record grove is the history of selected stock carefully chosen and nurtured through the vicissitudes of infancy with the utmost care. In such instances the grower knows every individual tree and uses every means in his control to force growth and urge forward a heavy crop. By nature the navel tree is exotic and must be forced to attain its perfection or the highest state or revenue earning power.

A large acreage planting of simply orange trees will not further the best interest of the industry here. Let us rather profit by the experience of our California neighbors. This is the time for the home holders. The speculator regime is over. We need and we need badly the man to build on a firm foundation. The trolley lines running through the orange districts makes possible the suburban homes and the little five acre orange groves. And if we encourage this class of grower we may in no distant future find that the bank deposits per capita of our valley cities rank with the towns like Riverside, Calif., said to be the third wealthiest town per capita in the United States. Market reverses and hard times have no place in the successful orange community. In the panic of 1907 the towns in the citrus belt of California were the only places where the banks were not forced to issue script. There was money available for all.

Let us have more growers and smaller acreage. Intensified horticulture is the slogan and the answer to the question does orange growing pay then will not be hard to find.

The Arizona pomelo or grapefruit and some varieties of lemon grow remarkably well here. There are many records where grapefruit trees at the age of fourteen years have yielded from \$20 to \$50 in one season. The increasing demand especially in the western states is such as to insure a ready market for the valley's future crops. And the eastern seaboard, however, we meet strong competition from Porto Rico and Florida. The pomeloes of these districts at present have the call with the fancy fruit buyers of New York.

But as our home market really consumes our product at higher prices than could be realized in the markets of the eastern cities we have not yet looked over hard for an eastern market. The fruit is early and holds a record for heavy production.

The Arizona lemon like the grapefruit surpasses the California product both in juice and weight. One-third of



Three-year-old Grape Fruit Tree

an acre here in the Salt River valley this year yielded over \$300. The lemon market the country over, however, fluctuates considerably during the year. This with the pending tariff situation is so unsatisfactory that lemon growing cannot be recommended. If lemons are put on the free list in the next congress the competition of the Sicilian lemons will be such as to embarrass if not ruin any grower who may have sufficient lemons for shipment. If, however the present tariff of 1½ cents per pound on imported lemons becomes fixed Arizona has 3000 acres in proved lemon land ready for development. This alone would insure to the profit and prosperity of a district now barely known outside of this state.

As lemon curing and culture entails four times the labor and expense that oranges and grape fruit require it follows with an uncertain market little development can ever be expected under present tariff conditions. But even so while the supply is limited to the requirements of home consumption the lemon trees here will pay well.

Perhaps the mention that Arizona is the only citrus district in the world free from scale insects and diseases will be timely. Rigid foresight must constantly be exercised to keep our groves free from this pest that has been a source of heavy burden to orange growers elsewhere.



Two-year-old Orange Grove

ing at the age of twelve years four to five picked boxes. In these instances the orchard has had expert care and cultivation and the original planting included only the best specimens of nursery trees. The writer knows here forty trees fourteen years old that have averaged three and a half to four packed boxes per tree or a money equivalent of \$8 to \$10 per tree. Ninety of these trees or a full acre would mean \$700 to \$900 as an acre's yield per annum.

In short it remains for some future grower to make one acre produce what it takes five now to do. From this the potential possibilities of orange culture can readily be seen.

For since the new development era started three years ago sufficient time has not elapsed to bring the young plantings into bearing and our best answer to the query now will orange growing pay is seen in the accompanying picture of a young navel grove at the early age of 2½ years now producing a few first class oranges to the tree. The thrift and vigor of this orchard in no way suffers with the best in California of a like age. After inspecting this grove a prominent California grower, a man who more than any other individual has brought more record groves into bearing in the Riverside district, remarked: "If orange growing with your exceptional conditions does not pay well here it won't pay anywhere."

The new era furthermore conclusively proved that we can grow nursery trees here better and in a shorter period than in California. And with an assured supply of excellent young budded orange trees we may look soon for a great development.

ARIZONA FIRE INSURANCE COMPANY A FACTOR.

Above everything else "MONEY" is the greatest need in Arizona and vital to its progress. If sufficient money were put into existing mines to develop them to their greatest possible production, the magnitude of the output would be beyond belief. Money is required for the development of business enterprises; the building of highways and railroads; and last, but not least, perhaps of greatest importance, money is required by the farmer, the rancher and the settler in order to enable him to bring forth the fruits of the earth in greater abundance and to bring under cultivation large areas which are awaiting only the expenditure of capital and labor to convert the desert into a garden.

Corporations operating in Arizona are of two kinds.

1. Those who take their fruit of our labor and the wealth of our land away, out of the territory for the benefit of strangers.

2. Those who keep money from going ever he may be, that he place their insurance away to outsiders and gather in from other ance with the "only Home Company," in sections of the country large revenues for preference to the many outsiders which are bleeding this state by taking the

No Arizonian should choose the first, as money we so badly need away from us to the last named becomes of tremendous benefit strangers whose only interest is value and rightfully claims the loyal support of every citizen. The Arizona Fire Insurance Company, which was organized company exist. A fire loss is a serious vital feature which affects every Arizonian larly to the business man where the is the fact that as it grows and expands cessation of his business means a large it will be the means of bringing an im- loss of trade and profit. To be able to mense amount of money into the territory, resume business operations with the least vital feature which affects every Arizonian larly to the business man where the is the fact that as it grows and expands cessation of his business means a large it will be the means of bringing an im- loss of trade and profit. To be able to mense amount of money into the territory, resume business operations with the least

If we consider that in the course of a final settlement by the insurance company at least \$1,000,000 a year, we shall then realize what a great and important factor stands pre-eminent in this respect, as its this company will be in the building up home office is located right in the territory of our new state, as all of this money will tory; all parts can be reached by its ad- labor and the wealth of our land be used at home. This truth should sink justers within forty-eight hours, and away, out of the territory for the deeply into the minds of the people and prompt settlement and payment of losses lead them to demand of their agent, who- is one of its leading principles.

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